

COLLABORATION AND M&A ISSUES

W. EUROPE 1991

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Abstract

Rapid change in the software and services industry has not only stimulated a high level of merger and acquisition (M&A) activity but has also generated an unprecedented number of strategic partnerships and alliance programmes.

This study examines the impact of these developments on the software and services market in Europe. Specifically it provides:

- A review of M&A activity and collaborative initiatives between vendors that affect the European information services industry.
- A discussion of critical considerations that must be addressed when implementing acquisitions or partnering strategies.

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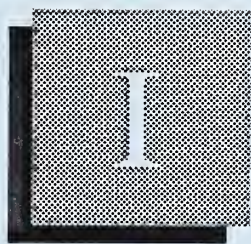
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Introduction





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I Introduction

A Objectives

During the 1980's mergers and acquisitions (M&A) and collaborative alliances developed as a key feature of the software and services market in Western Europe. The objective of this research study was to examine its impact on the information services industry. Specifically this research study:

- Reviews merger and acquisition and collaborative initiatives between vendors that affect the European information services industry.
- Discusses critical considerations that must be addressed when implementing acquisitions or partnering strategies.

B Scope and Methodology

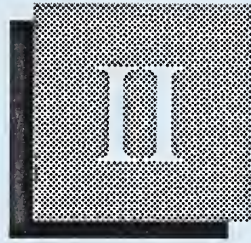
This research study is restricted to the Western European Software and Services market but comments upon significant activity outside this sector where considered relevant.

The research is based upon INPUT's on-going analysis of Western European software and services vendors. This is based on a survey of European vendor activity through field research covering in excess of three hundred vendors during 1991.

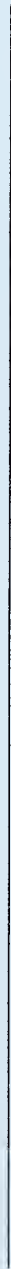
C Study Contents

The remaining chapters of this study are organised as follows:

- Chapter II is an Executive Overview that provides a summary of the key observations contained in the study.
- Chapter III discusses the major challenges facing vendors in the development of the information services industry and the role of M&A and collaborative initiatives in re-engineering its structure.
- Chapter IV concentrates on collaboration strategies looking at the options open to vendors, the inherent advantages and disadvantages, as well as providing examples of strategic partnering initiatives.
- Chapter V focuses on M&A activity providing examples and a brief discussion of significant pitfalls to be avoided by potential acquirers.



Executive Overview



II Executive Overview

A

Towards 2000 - Decade of Collaboration

The rapid growth of the information services business and the flotation of major services vendors on European stock exchanges fuelled increasing levels of merger and acquisition (M&A) activity throughout the 1980's.

In contrast the 1990's have commenced with a much more conservative economic scenario which has created a very different market environment for the development of information businesses. Partnerships, alliances and collaborative ventures are rapidly becoming one of the key features of the information services industry.

Vendors of information services are thus faced with significant challenges in developing their business. They must evaluate to what extent M&A initiatives will still form a valid strategy for business growth and then assess their need for involvement in joint ventures or other collaborative agreements.

These challenges can only successfully be met through the development of clear strategic aims for business growth. During the 1990's information services vendors will need to place considerable emphasis on:

- Understanding and interpreting the key changes taking place in the markets for information systems and services and the industry that serves it.
- Defining and evaluating the need for market response through collaborative ventures.
- Specifying and achieving strategic objectives through M&A activity.

B

Meeting New Competitive Challenges

Both the market environment for information systems and services and the information services industry itself are likely to undergo radical restructuring during the 1990's. Increasing pace of change, more globalisation of business and recession are all impacting the overall environment for information services. Business executives will place more and more emphasis on achieving demonstrable value and benefit from information systems investment as at the same time increasing systems complexity makes that harder to achieve.

Major market changes are emerging in the design of information systems and the way that information services are fulfilled. Powerful low cost *open systems* with new software architectures are allowing users to achieve considerable cost savings through *downsizing*. Lower cost data transmission equipment and services and the availability of more sophisticated software products is creating new opportunities for entire systems based on *networking*. A trend towards the farming out of business operations not considered core or critical to the addition of value within a firm is developing a huge opportunity to meet user's information services needs through *outsourcing*.

The key development that is facilitating these trends is the increasing availability of *open systems* used to imply:

- The availability of standards like UNIX for the portability of software.
- The standardisation of computer systems around accessible operating system platforms eg. MS-DOS and Windows.
- Standards for communications.

The emergence of software products rather than equipment products as the key platform choice, the possibility to utilise lower cost networked systems and the increasing attractiveness of outsourcing are creating revolutionary possibilities for the information systems and services business.

Vendors of information services must thus pay increasing attention to tracking user needs and requirements to ensure that they are not left behind solving yesterday's problems. Increasingly the spread of outsourcing generally and the need for speed of response will encourage vendors to form collaborative partnerships to cope with these difficult market conditions.

The real challenge for vendors will be the extent that they are able to handle this process *offensively*, controlling their strategic objectives through the use of collaborative ventures, rather than using them *defensively* to meet user needs that they have failed to anticipate and plan for.

The wide availability of financial resources, buoyant stock markets and industry optimism fuelled the M&A wave of the 1980's. Stringent assessment of long term benefits and a careful evaluation of strategic fit and synergies will be needed to successfully engage in M&A activity during the 1990's.

The increasing acceptance of *open systems*, *networking* and systems *downsizing* will radically alter the constituent proportions of the overall information technology business. The proportion of platform products (systems and systems software products) of total information technology expenditure has gone from 67% to 54% during the decade 1980 to 1990. It is forecast to fall to one quarter of total expenditure by the year 2000. A revolutionary shift to *outsourcing* would further exaggerate these proportions. These trends imply a fundamental re-structuring of the industry as it adjusts to these changing patterns of user expenditure. M&A and collaborative initiatives will be two of the key facilitators of this re-engineering of the information systems and services industry.

C Meeting Strategic Goals through M&A

Mergers and acquisitions primarily serve the need of ambitious companies to build critical size in the marketplace. EDS's 1991 acquisition of SD-Scicon, Cap Gemini Sogeti's 1990 acquisition of a majority stake in Hoskyns, are examples of strategic M&A initiatives to achieve a significant size in specified markets. Other options, establishing a strategic partnership or developing a *start up* operation involve drawbacks concerning management control, time and the cost of development.

The need to establish critical market size is one of the fundamental issues for ambitious firms. Increasingly complex system needs are driving the need for *integration* services and *prime* contractors capable of managing systems both in the development and operational phases.

Large firms can operate a strategy based on financial scale and depth of expertise, they can potentially achieve considerable strength through the diversity of their operations. In contrast small firms can compete just on cost, operating with limited overheads or by concentrating on developing specialist competences in order to occupy a specific niche in the market.

Against these two extremes, medium sized firms are saddled with the need for similar overheads and structures to large firms but without the same scale of operations to support them. There thus exists considerable pressure on medium sized firms to seek mergers (eg. the formation of the Sema Group from Sema Metra and the Cap Group in 1988, the formation of Axime in 1990 from the three companies FITB, Segin and Sodinforg) or acquisitions (SD's acquisition of Scicon in 1988, Sligos' string of acquisitions throughout the last few years).

At the same time the large players are continuing to raise the stakes by securing further acquisitions to build significant critical mass and market position, Computer Associates, Cap Gemini Sogeti and EDS are notable for this. The establishment of a collaborative agreement between CGS and Debis Systemhaus (made through the acquisition of a 34% stake in Sogeti by Debis Systemhaus) is further evidence of this trend.

The 1991 acquisition of SD-Scicon by EDS was one of the most significant hostile takeovers yet seen in the information services industry. The fear of defection by the critical personnel has always been felt in the industry to be a major drawback to hostile bids given so many other potential pitfalls, for example organisational and procedural problems. The more stringent economic environment of the 1990's is however dampening the likelihood of mass defections and creating an environment in which more realism is brought to bear on M&A deals.

All too frequently in the past M&A initiatives have come to grief because of the unrealistic price paid for the company and secondarily a failure to really assess the commercial logic supporting the deal.

Key tests of reasonableness that need to be applied by prospective acquirers include an assessment of its strategic fit, its *attractiveness*, an evaluation of the *costs* related to the long term profits to be generated and the contribution the acquisition makes to the *competitive* capability of the acquirer.

Successful re-engineering of companies, shifts into new geographic and service markets for example, can be made through the M&A route by acquirers that undertake a careful assessment of the *hidden* rather than *apparent* assets of the target company. The quality of people, products and services, the nature of the customer base are all more important than the financial history which does not necessarily reflect the potential of the enterprise in the future.

An assessment of these factors leading to a true evaluation of the potential worth of the organisation in the market and a realistic assessment of the costs of the integration process will determine whether a fair price is paid for the acquisition. These factors will be increasingly significant for successful M&A activity in the 1990's.

D

Using Collaboration as an Offensive Strategy

The increasingly more complex and difficult market conditions now prevailing in the information technology industry have spawned a multitude of collaborative alliances and agreements between otherwise highly competitive organisations. This process culminated in the agreement between IBM and Apple, two diametrically opposed historic rivals in the PC business, during 1991.

It has been common to refer to these agreements as *strategic* alliances, implying that each party to the agreement has carefully thought out strategic aims to be fulfilled. The reality is that in many cases these alliances are probably *tactical*, made as a *defensive* move rather than as a positive *offensive* strategy.

An important insight into the successful management of collaboration comes from an observation of the Japanese international experience. Japanese companies enter into alliances with the clear expectation that they will last only for a limited period of time, less than 10 years usually, and that they will be ended by the buyout of their alliance partner.

The starting point for successful collaborations must thus spring from a clear comprehension of the needs of the anticipated alliance, whether these are to meet specific marketing goals or financial objectives or gaining access to specific skills and capabilities.

Many different forms of collaboration are possible and again the extent of the agreement necessary must be carefully evaluated against the objectives and benefits expected. Partial shareholdings for example, widely practiced by *inter alia* IBM, have often proved disappointing because of the lack of control or the lack of commitment on the part of the minority partner.

The principal classification of collaborations possible includes the development of a true strategic relationship, the establishment of a joint venture company like IBM/Sema Group's Axone systems operations company, or ICL/Bell Atlantic's SORBUS independent maintenance company.

Another option is the joint development of technology or products. Parts of the IBM/Apple alliance could be categorised in this group as well as initiatives like the ACE (Advanced Computing Environment) consortium.

Co-marketing and third party arrangements, distinguished by the degree to which the parties cooperate in the marketing effort, are also very widely used to fulfil a full range of products and services for a specific customer base.

Examples of this type of agreement include that of Hewlett-Packard and Software AG for the marketing of the latter's system software products on HP 9000 Series equipment, Olivetti's agreements with Digital and Digital's agreements with Microsoft.

The following potential pitfalls must be thoroughly assessed.

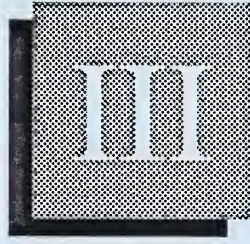
In approaching the development of strategic collaborations:

- Asymmetric benefits for the two parties.
- Overextension of expectations, particularly financial ones.
- The issue of control or loss of control.

Information services vendors can use collaborations as a positive offensive strategy but they must ensure the full development and evaluation of the business logic. They must view the alliance as a learning experience and only enter into financial agreements when a full exchange of information has taken place.

Full commitment from both parties is most likely to be achieved by a 50/50 ownership structure but it is important that management responsibility ultimately rests only with one partner. These arrangements need to be regularly reviewed particularly the level of resources being committed to the relationship.

It is likely that all information services vendors will find themselves increasingly drawn into collaborative agreements with other industry vendors, including competitors during the 1990's. Those vendors that are able to enter such arrangements with a clear understanding of what they expect to achieve from them can operate collaborative ventures as an offensive strategy for positive reasons. The alternative is likely to be a weakening of medium and long term competitive advantage.



Re-engineering the Information Services Industry

III Re-engineering the Information Services Industry

As the information services industry grew rapidly throughout the 1980's so did the level of merger and acquisition (M&A) activity. The beginning of the 1990's has however been marked by the prominence of collaboration activity. As the industry develops over the next decade it is likely that both these trends will continue as major factors in the re-engineering of the information services industry.

Vendors need to be prepared to undertake collaborative or M&A activity to strengthen their market position and adapt to new opportunities. However they need to approach both types of initiatives only after careful planning and preparation to define their goals and strategic direction.

This chapter supports this need by describing some of the challenges that vendors face as the industry undergoes radical restructuring during the 1990's, the forces impelling that change and the role that M&A and collaboration activity can serve. .

A Information Services Industry Challenges

Information technology products and services now represent a significant proportion of the overall economy. IT related investment probably now represents at least 20% of all capital investment in Europe.

To fully understand the challenges facing the information services industry it is important to briefly review:

- The impact of the economic environment.
- The challenges facing information systems management.
- The challenges facing information systems and services vendors.

1. Economic Environment

The term economic environment is used here to refer to the complete external situation within which an organisation must operate and respond to, both tactically and strategically, if it is to survive. Information systems based applications are increasingly an important part of that response. The external environment is the instigator of the need for change that affects first the organisation and subsequently its information systems. Exhibit III-1 summarises the main agents of change affecting European organisations.

Exhibit III-1**Information Technology Driving Forces**

Industry	Organisation	Information Systems
Globalisation and the single European market	International opportunities and competition	International processing requirements
De-regulation	New opportunities and increased competition	New application requirements
Specialisation	Core business and functions	Strategic systems
Pace of change	Structural change	Rapid response and deployment
Integration	Intra-organisation relationships	Intra- and inter-organisations systems

Few industries are free today from international impacts. Market barriers are being removed particularly within Europe in the development of the post 1992 single market, creating new opportunities and permitting the entry of numerous new competitors. Today's information systems strategy must:

- Provide international access.
- Use international standards.
- Support international operations.

De-regulation in the telecommunications, banking and finance and insurance sectors is another factor affecting the overall economic and business environment. It has already had a dramatic impact on the information systems needs of the organisations in these sectors as well as having far-reaching effects on the overall business environment.

The failures of the M&A explosion of the 1980's are causing senior management to focus on the core of an organisation's capabilities. The result is a more specialised and focused organisation that emphasises what it does best. Not only are organisations limiting the breadth of their mission, they are focusing on the functions most critical to that mission. If an automobile company does not need to manufacture radios to maintain its product differentiation, it also does not need to operate its own central computer centre. Information systems programmes must:

- Concentrate on strategic systems that support the critical functions.
- Provide the most cost effective alternative for secondary systems requirements.

The pace of change in the world has never been more rapid. Certainly information technology has been a factor in speeding up the pace, yet it remains the primary tool to help management deal with that pace. In the 1970's it was acceptable to take three to five years to build a major new system. Today it can be assumed that in three years the priorities will be different, that the organisation will be structured differently and it is therefore likely that the system will not meet the new requirements.

- Today's IS programme must be prepared to react rapidly to unplanned requirements, large or small.
- Doing the routine is important, but doing the unplanned is the measure of success today.

Competing on a global basis, specialising as a source of competitive strength, and responding rapidly to change, all drive today's critical requirement to integrate all aspects of an organisation. Since the core of integration is the flow of information, the impacts on the IS programme are extensive.

- Internally, the information network must support the flow of the organisation. Today's applications are described as large, complex, integrated and cross-functional.
- Externally, today's IS programme must create inter-organisational systems for example through the introduction of electronic data interchange (EDI) systems.

No large business or organisation is free from unexpected significant change today. Mergers, acquisitions, divestitures, management buyouts, and reductions in work force and levels of management are all commonplace. These occurrences introduce a requirement for change into the information systems strategy that was not common just a few years ago.

2. Information Systems Management Challenges

The new and changing organisational needs are just one of the forces challenging information systems managers. Additionally business executives and administrators are seeking effective returns on their IS investment. Exhibit III-2 lists the key challenges for IS managers in today's more exacting environment.

Exhibit III-2**Key IS Management Challenges**

- Improve Project Delivery Performance
- Apply Business Focus
- Manage Applications Maintenance
- Adapt to New Technology
- Manage Human Resources

Achieving an effective return on IS investment implies a need for improved project delivery performance. The history of delays and cost overruns that have so frequently occurred in the past clearly indicated less than adequate performance exacerbated by the implementation of some application systems that have in practice had limited utility.

Software development methodologies have been presented as the solution to these problems. While undoubtedly these methodologies and the appropriate software tools through which they are in practice implemented, have achieved success, too frequently they are seen as purely a technical solution. Applications must be developed with a clear linkage to the business needs. Quality assurance requirements can degenerate, for example, into a pure enforcement of standards and ignore the external realities of the application. Advances in software technology, like 4GL's and relational database management systems have also created quality problems, for example, serious degeneration of system response times.

Another important challenge is that of applications maintenance which absorbs a very considerable proportion of in-house development staff, estimates have been put forward for anything between 50% and 70% of total in-house resources dedicated to this task. Additionally IS managers face increasing technology challenges. Large user organisations have been slow to relinquish the perceived power inherent in a centralised main-frame system.

Staffing or human resources issues are also a key challenge for IS managers. In many IS departments staff turnover is higher than that in the rest of the organisation despite separate pay structures designed to offer higher compensation to retain them. It is often felt that IS personnel are more loyal to their "profession" than their employer.

A common complaint is that IS staff are more concerned with technical issues, working on an advanced software product to gain personal experience perhaps, than with the business aims and application needs of the organisation that employs them. Another problem is the lack of communication that so frequently occurs between computer professionals and those who understood the business needs, exacerbated by jargon that turns systems issues into technical issues. This is not a trivial issue as is evidenced by the case of system development methodologies originally conceived to be a business approach to computerisation. These methodologies have become repositories for techniques, and these techniques then become more important than the methodology. Discussions about the merits or otherwise of design methods through use of terms such as structure, cohesion, entities and coupling, have made the methodology incomprehensible to many end-users who are asked to approve the system design.

IS staffing can thus exacerbate the overall IS performance challenge where personnel cannot understand or relate to the overall business application requirement.

The need to get results from information systems, not just a return on an investment or an improvement in project schedules, is leading to the development of longer term relationships with external vendors. Key to successful fulfilment of corporate IS goals is the bridging of business application requirements and the technical competence to implement the solution. The information services vendor must have therefore a deep understanding of the clients operation and be able to act as a long-term repository of IS experience. The complexities of modern systems are making short-term contractual arrangements with third-parties extremely difficult to manage.

3. Information Systems and Services Vendor Challenges

The information systems challenges being faced by users are also being impacted by major challenges in the types of system platform being used and by new ways of managing them. Three trends that are likely to have a revolutionary impact on information systems vendors over the next decade are:

- Downsizing
- Networking
- Outsourcing.

Downsizing computer systems has become possible because of the availability of low cost high power computer systems that can be easily and cost effectively linked together through *networking* systems. New forms of system design eg. client server systems can replace the need for large centralised mainframes.

Networking thus opens up the opportunity to distribute the computer power to the point where the work takes place. The ability to move information (and thus ideas) quickly and cheaply will have a revolutionary impact on the organisation of business, commerce and administration, just as the great nineteenth century revolution was the development of transportation systems that allowed for the cost effective movement of people.

Outsourcing has principally manifested itself to date within the IT market in the form of systems operations contracts (facilities management). At the widest level, the farming out of business operations to a third party, it is likely to have a profound impact on organisational structures during the 1990's.

The key software and networking development that has facilitated the downsizing and networking trends has been the advent of *open systems*. There is much debate within the industry as to what *open systems* means. We use it here to imply the concept of standards, all of the technical standards required to allow users to build the systems that they need and want. Consequently *open systems* used in this sense implies:

- Standards for the portability of software eg. UNIX
- Standardisation of computer systems themselves which allow software packages to run on all classes of the same system eg. MS-DOS and WINDOWS
- Standards for communications.

Unprecedented improvement in cost performance is being experienced not just through technology advance but through highly competitive market conditions engendered by the *open systems* environment.

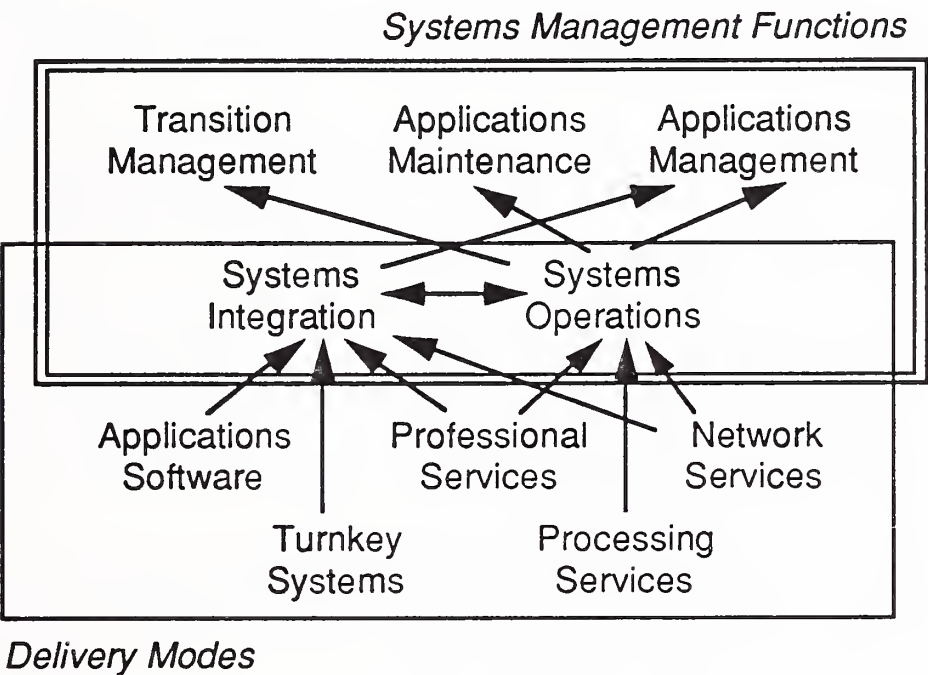
A major problem for the future growth of the industry is that the market is signalling a down turn in the rate of demand growth for investment in new applications. There thus exists, despite forecasts for increased numbers of computer system shipments, a scenario for industry shrinkage as price performance improvement outpaces new application demand.

These dramatic environmental changes are challenging information services executives to develop new revenue generating opportunities through careful tracking of user needs and requirements for services. New types of outsourcing service opportunities like supporting desk-top services and networks and supporting clients' application systems will increasingly be the focus of the future.

The diagram shown as Exhibit III-3 indicates the provenance of these new opportunities. The end of the 1980's saw the establishment of systems integration project contracting as an accepted delivery mode for investment in new IT systems, and the emergence of systems operations as an accepted service delivery mode for IT processes.

The 1990's are going to see the development of *system management* services increasingly more attuned to users' specific business needs. All of these new functions represent opportunities that vendors can exploit for revenue and profit growth.

Exhibit III-3
Information Services Market Opportunities



B

Information Services Market Scenario

The challenges facing information services vendors are having a dramatic impact on the development of the market as customer needs change and new services opportunities emerge.

This section provides a long-term perspective of the development of the computer market illustrating the significant changes that have taken place over the last decade and the dramatic changes that are likely to occur in the next.

During the past decade the information services market has grown at a compound annual growth rate of 23% in current terms (ie. at just under 20% per annum in real terms) and has increased in size by about a factor of eight. A comparison of the market sizes in 1980 and 1990 respectively are shown in Exhibit III-4.

The introduction of new service delivery modes and differences in the current dollar exchange rates make this comparison inexact. Nevertheless the comparison demonstrates the vast expansion that has taken place over the past decade in the information services industry even allowing for the inclusion of an inflationary element estimated to have averaged 4% per annum.

Most striking is the rate of growth that has been experienced in the demand for applications solutions (application software products and turnkey systems) and for systems software products.

A significant historical comparison can be made between the list of leading vendors for 1980, shown as Exhibit III-5 and those for 1990, shown as Exhibit III-6.

Exhibit III-4**European Information Services Market Growth**

Delivery Modes	\$ Millions		
	1990	1980-1990 CAGR (Percent)	1990
Processing Services	4,250	8	8,770
Network Services	-	-	4,030
Systems Software Products	720	32	11,400
Application Software Products	400	34	7,600
Turnkey Systems	620	33	10,800
Professional Services	2,720	23	21,700
Systems Integration	-	-	2,800
Systems Operations	-	-	1,220
TOTAL	8,710	23	68,300

Exhibit III-5

Leading Vendors - 1980
European Information Services Industry

Rank	Vendor	Market Share (Percent)	Estimated Revenues (\$ Millions)
1	IBM	5.1	440
2	GSI	1.5	130
3	ICL	1.4	120
4	GE Information Services	1.1	95
5	Cap Gemini Sogeti	1.0	90
6	Scicon	1.0	85
7 =	CISI	0.9	80
7 =	SEMA Informatique	0.9	80
9	CDC	0.9	75
10	Datema	0.8	70
11	SG2	0.7	65
12 =	Sligos	0.7	60
12 =	BOC Datasolve	0.7	60
12 =	DATEV	0.7	60
15	Datacentralen	0.6	55
16 =	Kommunedata	0.6	50
16 =	CCMC	0.6	50
18 =	TSIL	0.5	40
18 =	A-C (UCC)	0.5	40
20	SESA	0.4	35
	Others	79.4	6,930
	TOTAL	100.0	8,710

Exhibit III-6
Leading Vendors
1990 European Information Services Industry

Rank	Vendor	Market Share (Percent)	Estimated Revenues (\$ Millions)
1	IBM	7.2	4,900
2	Siemens Nixdorf	2.5	1,690
3	Cap Gemini Sogeti	2.4	1,650
4	Reuters	2.1	1,430
5	Digital	1.8	1,220
6	Bull	1.2	795
7	Unisys	1.0	720
8	Andersen Consulting	1.0	705
9	Microsoft	1.0	655
10	Sema Group	0.9	640
11	Finsiel	0.9	620
12	Computer Associates	0.9	595
13	Olivetti Information Services	0.8	560
14	Prime	0.8	540
15	Sligos	0.7	510
16	ICL	0.7	505
17	Mannesmann Kienzle	0.7	470
18	SD-Scicon	0.6	410
19	Axime	0.6	405
20	Oracle	0.6	400
	Others	71.6	48,880
	TOTAL	100.0	68,300

Three observations can be made from a comparison of Exhibits III-5 and III-6:

- The significant penetration of the information services industry by systems vendors due principally to the growth of the system software products market.
- The increasing level of concentration in the industry measured by market share.
- The role of mergers and acquisition in building leading market positions.

The system vendors have emerged to dominate the leading positions in information systems market principally due to a decade of 30%+ per annum growth in system software product markets. IBM held the leadership position in 1980 due to its processing services division activities.

The increasing level of industry concentration is illustrated by the table in Exhibit III-7. The increasing market share accounted for by the top vendors is itself partly caused by the incidence of M&A activity. For example two of the vendors in the leading five, Siemens-Nixdorf and Cap Gemini Sogeti owe their current size to significant acquisition activity.

Exhibit III-7

Information Industry Concentration - Europe

	Percentage of Whole Market		
Vendor Group	1980	1990	Percentage increase in Market Share
Top-5	10.1	16.0	+58
Top-10	14.6	21.1	+44
Top-20	20.6	28.4	+38

Other companies listed in Exhibit III-6 that have engaged in M&A activity that has had a marked impact on their market position are:

- Sema Group
- Computer Associates
- Sligos
- SD-Scicon
- Axime.

More detail concerning the M&A activity of these firms is provided in Chapter V Section A. Of the remaining 'independent' services vendors in the list it is thus only Reuters, Andersen Consulting, Microsoft and Oracle that have achieved their position almost exclusively by organic growth. It is only Andersen Consulting that has achieved that growth in the professional services market rather than in the more narrowly defined and higher growth sectors that have assisted Reuters (on-line financial data services) and Microsoft and Oracle (system software products).

The significance of acquisitions to the gaining of market position is well illustrated by EDS's recent acquisition of SD-Scicon (August 1991). On a retroactive basis for 1990 revenues, the combined EDS/SD-Scicon position would have ranked number six. EDS's own non-captive (ie. non GM generated revenues) in Europe placed them only in twentieth place in the industry ranking in 1990.

A very clear illustration of the dramatic change that the increasing significance of information services is having on the entire IT market can be seen from Exhibit III-8. In this analysis all information service delivery modes are broken up into the fundamental categories of:

- Information Systems (Equipment)
- Systems Software products
- Equipment Maintenance
- Services.

The services category includes data services (eg. processing services), as well as all professional services.

The trends depicted in Exhibit III-8 indicates the potential requirement for M&A and collaboration activity for company re-engineering as the industry will need to undergo a fundamental restructuring to meet the changed needs of the market environment. One very clear change in the competitive environment of the computer industry, compared to 10 years ago, has been the blurring of the boundaries between different sectors of the industry (see Exhibit III-3 above) leading to:

- Traditional *service* companies adding products as the basis for developing further service business opportunities
- Traditional *product* companies adding service functions to support the further penetration of their products in the market.

Exhibit III-8

European Information Systems and Services Markets

	\$ Billions				
	1980	CAGR 1980-1990 (Percent)	1990	CAGR 1980-2000 (Percent)	2000
Services	8	20	50	15	200
Systems Software	1	32	11	10	28
Equipment Maintenance	4	14	15	-1	14
Systems	22	11	65	-5	40
TOTAL (Rounded)	35	15	140	7	280

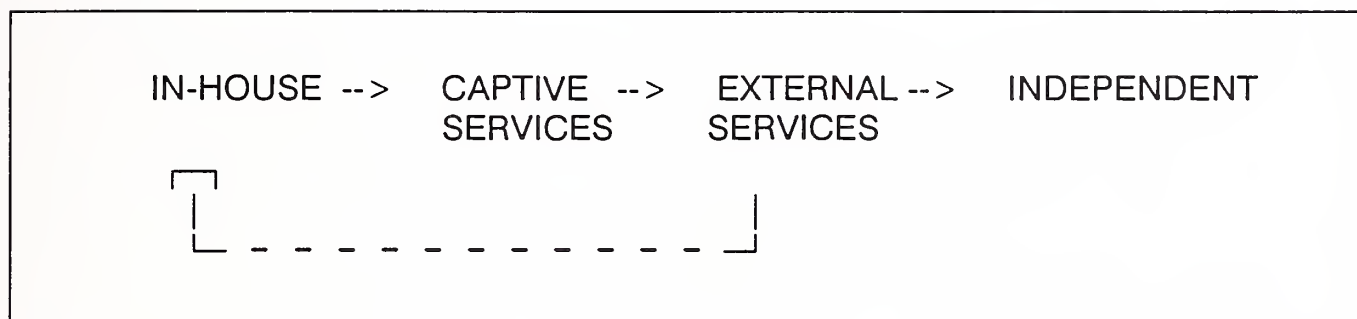
This change is particularly noticeable amongst the larger vendors whose breadth of activities covers systems integration and large professional services project development contracts.

In order to meet user needs for more broadly defined services and in order to respond to change more quickly than would be possible internally, vendors have responded by increasingly becoming active in:

- Collaborative agreements
- Mergers and acquisitions.

A strong forecast for the growth of services can be supported by a fundamental shift from in-house to external service (outsourcing) for significant IS operations.

The developmental progression for IS Departments depicted in Exhibit III-9 can be facilitated at various stages by collaborative ventures between users and vendors, joint equity stakes, mergers and full acquisitions. Vendors who address the outsourcing market have a major opportunity to develop their business through the acquisition of user IS divisions.

Exhibit III-9**User Information Services Progression**

Developmental stages in the provision of information services.

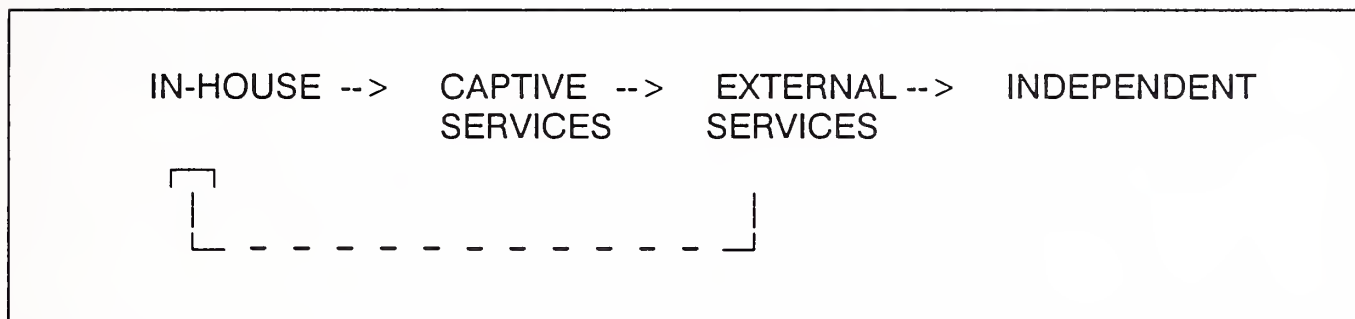
C**The Role of Collaborative Agreements and Mergers and Acquisitions**

As the information services industry undergoes continuing and increasingly more rapid change over the next decade so will the role of collaborative agreements and mergers and acquisitions expand. These will be two of the major mechanisms by which the industry will be re-engineered to adjust to the dynamics of the market.

Any company facing the challenge of expanding into new markets, whether defined geographically or by service product has a number of strategic options available to them:

- Start-up a new operation
- Employ an agency
- Establish a strategic partnership
- Acquire or merge with another company.

Each of these options presents certain advantages and disadvantages as summarised in Exhibit III-10. In this section we are concerned with the rationale for undertaking collaborative agreements (strategic partnerships) and M&A activity from the perspective of information services vendors.

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Exhibit III-10

Strategic Options for Information Services Vendors

STRATEGIC OPTION	FOR	AGAINST
NEW START UP	FULL CONTROL	TOO SLOW AND COSTLY TO ACHIEVE FULL MARKET POSITION
SELECT AN AGENCY	MINIMISES INITIAL INVESTMENT	LACK OF CONTROL
ESTABLISH STRATEGIC PARTNERSHIP	ACCESS TO MARKETS AND EXPERTISE	HIGH POTENTIAL FOR CONFLICT
MERGER OR ACQUISITION	ACHIEVE SYNERGY	FINANCIAL COMMITMENT HIGH MANAGEMENT CHALLENGE

1. M&A - Principal Motivators

The motivating factors that drive M&A activity are complex and will often be particular to the companies and senior executives involved. Some of the principal factors are likely to relate to:

- The desire to operate on a larger scale for economy and profitability.
- The desire to expand market share and thus increase pressure on competitors.
- The need to diversify into new markets and effect a restructuring.
- The need to enter a new geographic market.
- The desire to inject new management into an unsuccessful company, for example rescuing a company in distress.

In addition to these positive motivators there may well be negative motivators in operation. Mergers between companies can be motivated by defensive reasons. For example two companies might see themselves as being vulnerable to competition or indeed to being acquired in a hostile situation.

In the information services industry M&A activity can largely be attributed to the need to achieve a critical strategic size, to handle larger contracts for example, gain access to a critical technology or market base of customers. Achieving critical size was clearly one of the prime motivators behind Olivetti's recent failed attempt to merge its services division OIS with Finsiel in Italy. It is this need to obtain critical size that is discussed in more detail below.

To obtain a better understanding for the vendor's rationale in approach M&A it is instructive to look at the structure of the European information services industry, analysed by the principal revenue size categories.

Exhibit III-11 illustrates the vendor analysis categorised by annual revenue bands. Those companies with revenues of over \$100 million per annum can typically be described as operating on a *global* basis, or at least aspiring to operate globally. This group contains all the major system vendors.

The next category (annual revenues falling in the range \$10 million to \$100 million) can be described as *regional* vendors. They operate in more than one country or concentrate on specific regions. For example a number of large French information services vendors (eg. Sligos) have expanded into Italy and Spain; the largest German vendors target the German speaking parts of Europe, whilst UK based vendors have targeted the English speaking markets.

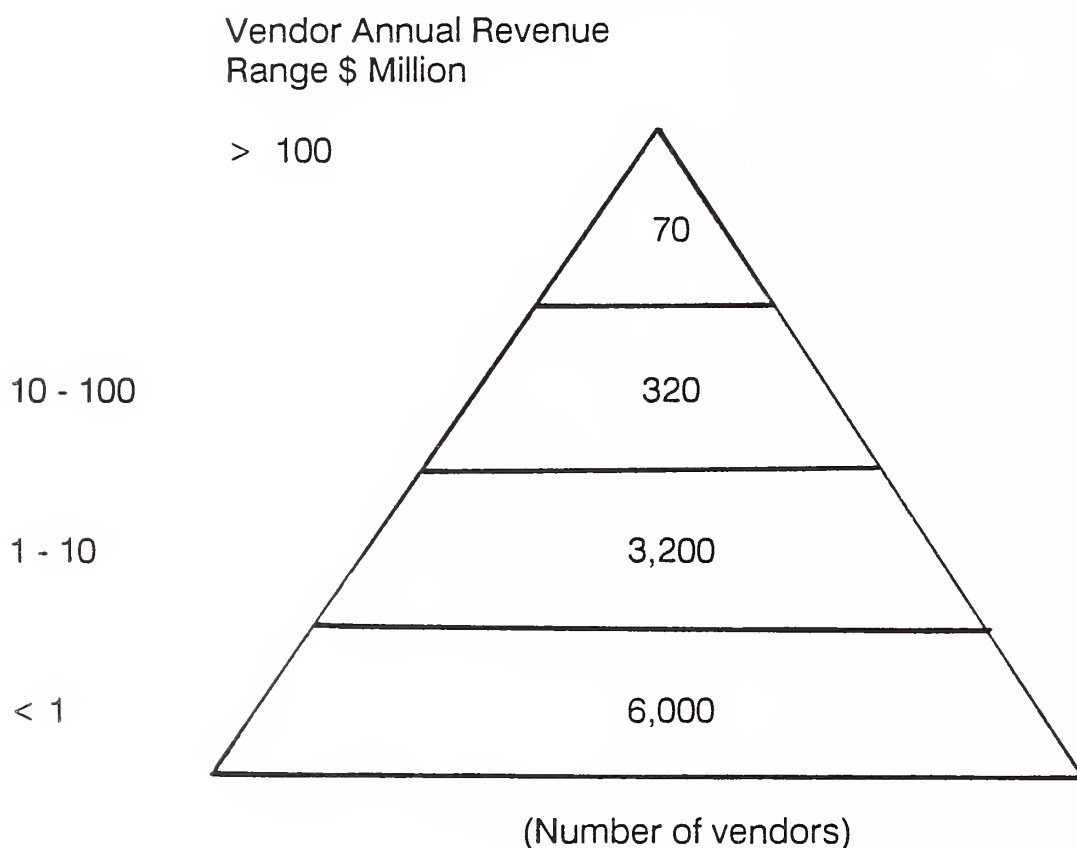
Those vendors with revenues falling in the range of \$1 million to \$10 million per annum are almost exclusively national companies. They may have some exports but these are likely to make only a marginal contribution.

Companies with revenues under \$1 million are likely to serve only either a very specialised or localised customer base and are very unlikely to export products or services.

In total INPUT estimates that there are some 10,000 vendors operating in the European Information Services industry. There are also probably another 20,000 organisations generating some information services revenues that does not exceed \$250,000 per annum, the minimum level at which INPUT would recognise the organisation as a vendor firm.

Exhibit III-11

Industry Structure
European Information Services Industry (1990)



The major vendors, those in the top tier of the industry, are clearly motivated by the ambition to develop critical market size and geographic coverage to support a *global* position.

The need for global market positioning follows the general movement towards international corporate activity and the emergence of larger, regional trading blocs. The EC initiative to create a single European market during the 1990's is one important manifestation of that trend. Within Europe the targeting of '1993' as the starting year for this process has caused companies to re-assess their market positions. Increasingly strong *national* companies have sought to establish a wider European base. Making an acquisition is one of the few realistic strategies that can be used to escape the 'middle size' dilemma. However, although it may be a necessary condition for achieving critical size, it is certainly not a sufficient one.

The need for critical market size is determined by other factors, in principle the capability to offer a genuine breadth and depth of skills, services and management experience and expertise. This is particularly critical for systems integration contracting where a vendor requires the customisation tools, experience and capital structure to serve as the prime contractor. These are the key attributes of the large firm which will impose significant demands on management attempting to create them for the potentially diverse cultures of acquired firms.

We can summarise the size dilemma for information services vendors in the following way:

- **LARGE** firms compete on the scale and depth of their expertise and can achieve strength through diversity.
- **MEDIUM** sized firms are just not big enough to offer the same depth of skills across a broad range of services as are the large firms but they tend to have similar overheads and cost structures.
- **SMALLER** firms can compete on cost.
- **NICHE** firms compete on high competence in a narrow sector.

There thus exists a tendency for concentration at the top and fragmentation at the low end of the industry (see Exhibit III-11) with medium sized firms being squeezed in the middle. This is one of the key motivations for M&A activity. However the appropriate size of an organisation will be a function of the particular objectives chosen or forced upon the company by competitors and market conditions.

An alternative to an M&A strategy in this situation is to seek some form of collaboration, and this is discussed in the next sub-section.

2. Collaboration - Principal Motivators

The need to establish a *critical* market position, discussed in the previous section as one of the principal motivating forces for M&A activity, is also a powerful motivator for collaborative ventures. The gaining of that critical market position can imply the need for:

- Meeting specific marketing goals
- Meeting financial objectives
- Gaining access to specific skill capabilities.

Alliances will often have clear marketing goals. An alliance can assist in gaining access to markets that would otherwise be out of reach or require unrealistic levels of finance. An alliance can bring the key contacts and local or specialist market knowledge required for successful market penetration or development.

The financial aspect, is clearly a major factor, few companies can afford the costs of developing all of the marketing opportunities available to them. Additionally an alliance may represent a means of controlling operating costs where an alliance can be formed with an organisation having a lower cost structure to fulfil some vital part of the overall client contract. This could of particular importance in situations where the vendor needs to provide an international service.

Another key factor that may motivate the need for an alliance is access to specific capabilities. An alliance may just serve to augment internal capabilities. Possible capability areas that vendors might seek to just supplement through an alliance could include:

- Network management
- Equipment maintenance
- Disaster recovery services
- Applications maintenance
- Applications development
- Consultancy.

System vendors have been one of the most active groups adopting collaboration strategies. IBM in particular has created numerous alliances and relationships to assist its drive into system services. Groupe Bull has adopted a partnership approach to the SI market, developing relationships in Europe with amongst others, Andersen Consulting, Cap Gemini Sogeti, Logica and British Telecom.

Services vendors still need access to the powerful marketing leverage that system vendors wield. However the need exists for system vendors to extend or maintain their sphere of influence in an increasingly *open* world.

Systems Integration and *Outsourcing* services represent a potential threat to account control. System vendors seeking partners to assist them in protecting their existing sources of business.

In many situations the client, aware of the lock-in to a particular equipment vendor, is anxious to have the guidance of a *full service* independent firm that can, in effect, act as an umpire for strategic platform and system architecture decisions.

The emergence of this new buying approach will present a channel control problem to equipment vendors, potentially cutting off the direct interface to the client in some situations. The general move in the industry towards emphasis on applications (services) rather than equipment (products) is increasingly forcing equipment vendors into commodity markets as channel control is lost. Commodity markets are dominated by the lowest cost producers or those vendors with an excellent or unique product strategy.

Some examples of vendor alliance strategy objectives are identified in Exhibit III-12 and discussed below.

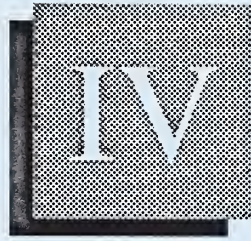
System vendors have developed strong alliances, to augment dedicated in-house staffs, and to add software products and professional services (including business consulting). These moves allow them to offer a full range of support services. IBM and Digital are involved in many such alliances. Vendors have also added systems operations to their offerings, and are using alliances to supplement internal systems operations resources. Systems operations firms recognise systems integration contracting as a vehicle for building systems for clients that they can later convert into long-term systems operations contracts. Communications firms are adding both software and professional services to expand network services into full-scale systems integration capabilities.

It is not clear how successful these actions will be in expanding market share. For some vendors, the addition of new capabilities and entry into new markets represents a real challenge to traditional cultures. Some vendors have already recognised that they are better served by leveraging their internal skills and products rather than attempting to provide a large number of services and products that are not synergistic with their core businesses.

Exhibit III-12

Emerging Alliance Strategies

Core Business Category	Required Additional Capabilities	Strategic Objectives
Computer Equipment	Software Development Software Products Systems Operations	Full Range Services
Telecommunications Equipment Vendors	Software Development	Network SI
Professional Services - Management Consultancy	Software Development Software Products Network Services Systems Operations	Full Range Services
Professional Services - Software Development	Software Products Management Consultancy Systems Operations Network Services	Full Range Services
Systems Operations	Professional Services	Systems Operations
Engineering Products Companies	Professional Services	Support Core Business
Network Services Vendors	Professional Services	Network Services
Telecommunications Service Operators	Software Development	Network SI



Vendor Collaboration Strategies



IV Vendor Collaboration Strategies

The emergence over the last few years of vendor alliances, distribution agreements, collaborative research and equity partnerships, has rapidly become one of the most significant features of the information systems and services business.

The selection of partners and the management of collaborative ventures are likely to be increasingly important challenges for vendors during the 1990's. This chapter addresses these issues through an examination of:

- The various modes of collaboration possible
- The potential benefits and pitfalls associated with strategic partnering
- A review of some significant examples of vendor collaborative initiatives.

A Strategic Partnering Options

The concept of strategic partnerships and alliances involves separate, legal entities (and in some cases even competitors) assigning roles within their overall strategic plans to other vendors' products or services in an attempt to include areas of business that are outside their current capabilities and resources.

Strategic partnering represents a fairly new concept of cooperation among companies. Although it has recently found particular favour in the information services industry, legal and structural precedents for strategic partnering have come from other major industries in recent years, such as in the automobile, steel, petrochemical, and pharmaceutical industries. Much of the initial strategic partnering in these other industries has been with foreign companies, particularly the Japanese, who have long been practitioners of strategic partnering, which is related in part to the policies of their governments.

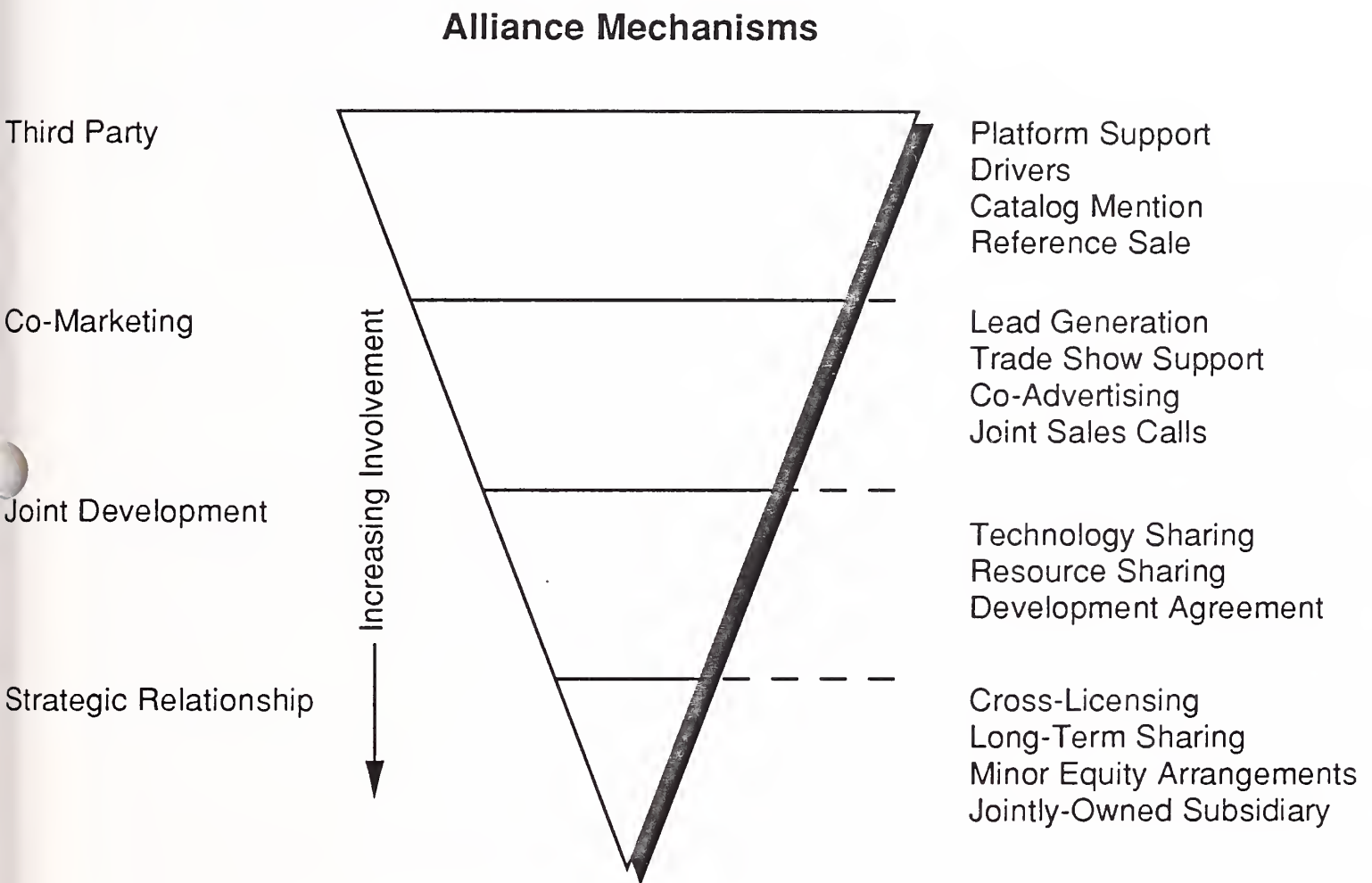
Strategic partnering is not an "all or nothing" proposition: it can be used as a limited support option at every level of the corporation, eg., capital requirements, marketing sales, service, and R&D, as depicted in Exhibit IV-1.

Exhibit IV-1**Strategic Partnering with the Outside World**

FINANCE	Venture capital, "big brother" sponsor
MARKETING	Packaging, pricing, positioning
SALES	Distribution channels, manpower, wholesale/retail outlets
SERVICE	Post sales support
R&D	Partnerships

There are several types of alliance mechanisms that can be used to achieve these various support options and these are shown in Exhibit IV-2. The partnering relationships explained below are ranked in the order of highest strategic involvement and thus of decreasing commitment or expenditure.

Exhibit IV-2



1. Strategic Relationships, Joint Ventures

There are occasions when companies agree that it is in their best interests to work together over a long period of time, generally years. Resources are expended and the results of the efforts are shared and agreed upon up front. A jointly-owned subsidiary or equity sharing arrangement using cross licensing is the technique that is generally employed.

The creation of strategic relationships has become over the last several years one of the key features of the information technology industry. System vendors, notably IBM, have been particularly active in establishing strategic relationships with other firms, the recent IBM/Apple accord being one of the most interesting, given the competitive history of the two firms. Further examples of strategic relationships for IBM and other vendors are given in section C below.

Some industry participants have preferred to describe such relationships as *tactical* alliances implying that the goals envisaged are relatively short term and that the motivation for them is probably more defensive than offensive.

Venture capital financing for the startup company can also be considered as a type of strategic partnering.

Still another type of strategic alliance activity is that between the information service vendor and a third-party maintenance provider, particularly one that can provide cheaper maintenance rates than the original product manufacturer. Such relationships can help the information services vendor establish tighter account control over the maintenance and support revenues coming from its user base as well provide for the continuing of relationships that help foster add-on product sales.

One of the most significant trends in the information services industry, which is promoting the need for strategic alliances, is the strong demand developing for integrated, networked solutions often delivered by means of a systems integration contracts. The ability to provide multivendor connectivity and a broad array of product offerings, and the necessity to customise many such project offerings, are requiring alliances among vendors.

This requirement is particularly strong in the government, and particularly the defence, sector. The scale of projects (several hundred million dollars) is so great that a team of suppliers is required to absorb the project management and financial risk involved. For example in the recent CHOTS contract for the UK Ministry of Defence the winning prime contractor ICL has estimated its bidding costs at nearly \$40 M and the unsuccessful consortium, led by BT and including Bull, SNI and SD-Scicon, pulled out after investing in the region of \$35M to bid.

In all of these areas of opportunity, the key to a successful relationship is finding a partner that can perceive the benefits the alliance will bring, while preserving the independence of each. This entails a substantial element of risk and mutual trust, not only in the abilities of the respective partners but also in the ultimate goal that each is pursuing. An arm's length relationship is best, where possible, since it preserves the identity, freedom of choice, and image of the partners. However, many will find it necessary to conclude a closer agreement involving mutual monitored shareholdings representing commitment and interest in the growth and profitability of the partner.

2. Joint Development

Joint development is used as a mechanism to create a capability using both participants' technology. This means that finance and other resources are budgeted, and the budget to be created is mutually advantageous and probably available more quickly than if it were attempted by either party on a separate basis.

The joint development relationship frequently is part of or can be developed into a longer term relationship, which INPUT defines as a strategic relationship. Thus the IBM/Apple joint development has already been referenced above as a strategic alliance. The relationship established between ICL and Fujitsu eventually led to an 80% stake being taken in ICL by Fujitsu.

More than two vendors can be involved in joint development initiatives and this has arisen through the need to establish system and software standards as in the ACE consortium. Another example is that of Aldus, Caese Corp, Eastman Kodak, Hewlett-Packard and Logitech who have formed a consortium to develop an application program interface and protocol to enable easier integration for imaging equipment and software products. The initiative has been named CLASP (Connecting Link for Applications and Source Peripherals).

3. Co-Marketing

This arrangement strengthens the third-party relationship (described below) by the amount of additional resource that each company expends to proactively help market each other's products.

The type of activities used in this mode of partnering are:

- Lead generation
- Trade show support
- Joint sales calls.

This type of relationship can also be characterised as more of a software publisher's role for the computer systems vendors. Computer systems companies more recently have been very aggressively pursuing cooperative marketing partnerships.

An example of this kind of activity is that between Hewlett-Packard and Software AG. In this arrangement the two companies will jointly market UNIX versions of Adabas, Natural and Network for HP 9000 computer systems from January 1992.

ICL has a similar type of agreement with D&B Software for the provision of applications products on ICL Series 39 systems.

4. Third Party

In this relationship, the software vendor develops the application to work on a specific system platform or with a specific software module. This may entail the need of a small amount of software to customise the application to the particular environment. When this occurs, the two parties place the relationship in a catalogue of such relationships. It is this which differentiates the relationship from that of co-marketing where the marketing is pro-active from both parties.

This is a popular alliance mechanism today, with each of the larger computer systems vendors, in particular, having developed hundreds of such relationships in an attempt to stretch the potential appeal of their systems as far as possible.

Value-added reseller (VAR) agreements and agency agreements between computer system vendors and independent software developers have become an extremely important distribution channel. VAR relationships can move into the co-marketing classification where the system vendor becomes increasingly active in marketing particular application software products. This direction is impelled by increasing competition amongst system vendors for the higher-quality VAR's or VAR's with the most significant application products.

Companies such as Digital Equipment are placing a major emphasis on third parties for application software solutions, with Digital providing the application development tools to facilitate the integration of the application software with its network architecture and systems software products.

In contrast IBM has placed more emphasis on equity participation, for example with PAXUS in insurance systems, with QSP (Quality Software Products) in accounting systems, in order to attempt to gain more control over the development and marketing process.

Another example of a third-party collaboration was that announced during June 1991 between Olivetti and Pyramid Technology Corp. Olivetti's systems and Networks division is to resell Pyramid's MIServer S Series family of UNIX (R)-based servers as part of its Open Systems Architecture, it will be called the Olivetti LSX 6500 Series.

B

Advantages and Disadvantages of Strategic Partnering

The adoption of strategic partnering as an integral part of a vendor's market thrust has a number of paired advantages and disadvantages. Whether this approach will be a positive or negative step for a given vendor will be determined in large part by management strength. Strategic partnering is not a prop for weak management or a panacea for internal structural weaknesses. Strongly managed companies, can thrive on this approach because it extends their sphere of influence. It can expand their technological market and product and managerial horizons while increasing the pace of growth and access to new markets.

Vendors can emerge from strategic partnering either strengthened and invigorated or in disarray: learning about the company's strengths is productive - learning about the company's weaknesses in excruciating detail can be destructive and debilitating.

Some of the principal reasons that contribute to the difficulties inherent in managing strategic partnerships are:

- The intended benefits are asymmetric and expectations are overextended, particularly in respect of financial goals.
- They can involve a loss of autonomy and control for one or other of the partners.
- The circumstances of the business unit may change.
- They are inherently more unstable than acquisitions and thus require significant investment of time by senior executives.
- There are no established guidelines on how to handle the intercompany relationship.
- Each relationship is unique, and the parameters governing it are constantly changing.
- Strategic planning relies on companies doing an excellent job at something some companies have difficulty with: strategic planning.
- Strategic partnering has such a profound effect on a company that it may alter the organisational structure on an ongoing basis, as the partnership develops.

The difficulty inherent in managing collaborative ventures has led to considerable pessimism amongst managers as to the success rate for strategic partnering. However research undertaken by McKinsey and published during 1991 provides a more optimistic picture. The study, which covered acquisitions as well as alliances, found that over half of the initiatives were successful on the basis of financial criteria. Alliances, in distinction from acquisitions, can be used to develop both the core and non-core activities of a company, acquisitions work best when used to strengthen core activities. Alliances can also be used effectively to fill functional holes in an organisation and to share finance.

Strategic partnering has proven to be successful among Japanese companies, and as such the Japanese model for partnering/collaboration is now being studied in more detail. (See *Harvard Business Review*, Jan.-Feb., 1989). Guidance is needed on how to maximise the advantages of partnerships while guarding against negatives, such as the unwanted transfer of competitive advantages to the partner.

One observation that has been made concerning Japanese international alliances is that they enter into them with a clear expectation that they will last for less than 10 years and that they will end by the buy-out of their partner.

Some of the factors to consider for achieving success in strategic Partnering include the following.

For the smaller partner:

- Avoid an overdependence on the partner that could substantially weaken the smaller partner if the alliance is cancelled.
 - Don't look to the bigger partner as "the" solution for a particular problem, or don't let the bigger partner become the largest customer.
 - Don't let the bigger partner have exclusive marketing rights to the product.
- Encourage a substantial equity participation to discourage sudden dissolutions of partnerships and to increase level of interest in the success of the alliance.

For partners of all sizes:

- Ensure the full development and evolution of the business logic of the proposed alliance before entering into financial negotiation which may inhibit a frank exchange of information - you need to know your partner. View the alliance as a learning experience covering not only the products and services involved in the exchange, but also other facts of the other company's operations. However, avoid being a loser in a strategic partnership by closely monitoring the information that is exchanged subsequently.
- Evaluate your own strengths and weaknesses as well as those of your partner prior to the negotiation of the alliance.
- Full commitment from both parties is most likely to be achieved by a 50/50 ownership arrangement, but management responsibility has ultimately to rest with one partner. Joint ventures should aim to have strong executives that protect them from potential conflicts between the owners.
- View the alliance from the standpoint of longer-term strategic goals, especially the particular goals to be achieved from the partnership. Alliances can be viewed as a way of buying time.

- Evaluate on a regular basis the benefits/disadvantages of the partnership including the amount of resources being devoted to the relationship. Clear motivation and measurement schemes must be devised together with effective mechanisms for problem resolution involving senior executives.
- Recognise that difficulties are likely to rise very early in the relationship as lower levels of the respective organisations become involved. Some of the hardest management effort must come after the initial *plunge* has been taken to set up the relationship.

Clearly, the development of collaborative agreements require great self-confidence, managerial strength, and flexibility, which are not easily found. But the greater degree of sharing, the greater the potential for benefits to both parties. The final success of the strategic partnership, however, lies in the accuracy of the evaluation of the marketplace and the strategic plan that is developed.

Some of the key advantages and disadvantages of strategic partnering are summarised below:

- Advantages
 - Provides an evaluation period for a longer-term company and product fit
 - Combines complementary strengths
 - Minimises risk of a more permanent relationship
 - Expands marketing/product capabilities
 - Facilitates bidding on complicated deals
 - Accelerates time-to-market of individual products
 - Substitute for venture capital financing.
- Disadvantages
 - Today's partner can become tomorrow's competitor
 - Some loss of control for individual companies
 - Relatively high failure rate of strategic alliances
 - Can accentuate inherent management weaknesses.

C

Examples of Strategic Partnering

This section provides examples of collaborations between vendors. The first is devoted to IBM which has undergone an unparalleled process of strategic partnering over the last four years. The second major example is that of Cap Gemini Sogeti and Debis Systemhaus whose collaboration has made a significant impact on the independent service vendor environment, the final part contains examples of collaboration initiatives by other vendors.

1. IBM Collaboration Initiatives

Exhibit IV-3 lists some major collaborative alliances undertaken by IBM. The collaboration announced between IBM and Apple represented a significant reversal of conventional marketing thinking given IBM's historical links with Microsoft.

Announced on July 3rd 1991, the partnership is designed to cover four areas of co-operation:

- The development of *object oriented* software. (Taligent joint-venture).
- The development of further software interfaces between the Macintosh and IBM PC's.
- IBM to licence Motorola to build its RISC chip for inclusion in future Apple products.
- The development by IBM and Apple of a *multimedia* system that integrates desktop PC, video, stereo sound and computer games capability. (Kaleida joint-venture).

IBM's continuing problems with the establishment of OS/2 as a de facto standard in the face of the runaway acceptance of Microsoft Windows in the market has led to the desirability of extending IBM's sphere of influence into the formerly alien Macintosh market. From Apple's perspective the pressure to find partners to absorb part of their R&D burden was becoming critical.

John Sculley, Apple CEO, is on record as stating that IBM- Apple-Macintosh was interested in finding a European partner to join in these collaborative effort.

Exhibit IV-3

Examples of IBM Collaborative Ventures

COMPANY	DESCRIPTION
Apple/Motorola	Development and licensing agreement
LOTUS	Marketing and development agreement for <i>Notes</i> and <i>cc: Mail</i> .
Wang	IBM states intention to invest \$100M <i>June 1991</i> . Wang has agreed to port image processing software onto IBM system platforms.
Novell	<i>FEB '1991</i> . An agreement to market and develop networking products which compete with those IBM developed with Microsoft.
Coopers & Lybrand	Meritus
Thomson Data Images SA	IBM has a 49% stake in this joint venture with Thomson SA to develop RS/6000 applications products.
Keon	Creation of joint venture company in Spain, to address digital document processing applications.
Bank Degroof	Joint company formed in Belgium to develop banking applications.
Servicios de Informacion Geografica SA	Joint venture of IBM Espana (51%) Trabajos Catastrales Tracasa (49%) <i>December 1991</i> . Company to market geographical information products and services.
Systems Facilities Service BV	A joint venture formed in <i>June 1990</i> between IBM Nederland and HCS Technology NV to provide installation and support services for IBM mainframe systems.
Computer-Systemdienste GmbH	Joint venture between IBM Deutschland and Robotron Acosta AG to exploit systems and services opportunities in the former East-Germany, <i>October 1990</i> .

Exhibit IV-3 (Continued)

COMPANY	DESCRIPTION
AD/Consultants SA	Joint venture with Cap SESA SA (51%) to provide software engineering workshop services based in AD/Cycle.
ISITEC SA	Joint venture with Soleri-Cigel SA (51%) <i>October 1990</i> in France to offer systems integration services to financial institutions.
Tournet SA	Joint venture formed <i>November '89</i> to offer value added network services.
Axone	Formed in 1987. IBM a 45% stake, SEMA Group 40%, Credit Agricole 30% to offer systems operations services.
Danet AS	A 50/50 joint venture between IBM and the Danish Telecom to offer value added network services.
Intesa	A Fiat/IBM joint initiative set up in 1988 to provide information services.

IBM and LOTUS announced in June 1991 a collaborative agreement declaring it to be one of the most significant partnerships yet. The agreement is designed to:

- Enable IBM to sell the groupware package *Notes* and the electronic mail system *cc: Mail* as part of its Officevision family of integrated office automation programs.
- Enable IBM to include parts of these products into future versions of OS/2.
- To lead to joint development projects of IBM and LOTUS.

Development work envisaged includes a common messaging system for *Notes*, *cc: Mail* and *Officevision/2 Lan*.

The collaboration gives IBM the opportunity to plug gaps in its current software portfolio. It provides Lotus with an opportunity to gain a stronger position in the groupware market particularly in larger enterprises.

IBM has formed a joint-venture consultancy and services company, Meritus, with Coopers & Lybrand. Initially active in the United States the joint-venture is targeted at supporting manufacturing companies in the consumer package goods, pharmaceuticals, aerospace, defence and automotive industries.

IBM Espana SA has taken a 30% stake in a new company Keon (May 1991), capitalised at \$833,333. Other partners are Banco Bilbao Vizcaya SA, (30%) Iberduero SA (30%) and Socintec SA (10%). The company aims to specialise in technical software for digital document processing and industrial applications based on expert systems.

IBM Belgium set up during 1991 a 50/50 joint-venture company capitalised at \$3M with Bank Degroof, Finance Technology SA/NV to operate in Belgium and Luxembourg. It has been established to develop a modular suite of banking software aimed at applications for banks with less than 1000 staff. The systems are to be based on AS/400 platforms.

Tournet SA, capitalised at \$3.7M in November '89 with IBM Belgium holding a 40% stake, SEMA Belgium 20% and CODITEL SA 40%. Tournet was formed to offer value added network services to the European travel industry.

In addition to collaborative ventures IBM has also executed a policy of taking equity stakes in existing companies. Some examples are given in Exhibit IV-4. IBM's motivation seem to have been principally one of gaining more control over the product development policies of these companies, marketing agreements have usually existed as well for channelling software products to customers.

IBM has also developed collaborative agreements and services through IBM's marketing organisation. In practice control over R&D policies, particularly in respect of open systems platforms is probably frustrating the original objectives. It can therefore be expected that IBM will reverse out of many of these equity participations placing more emphasis on joint ventures where control can be exercised through 50/50 ownership agreements.

IBM has also developed collaborative agreements specifically to support its own R&D objectives. For example IBM announced in September 1991 a joint development agreement with Thinking Machines the computer system company with the reputation of being a leader in the field of massively parallel supercomputing.

The intention is for the two companies to develop links between IBM's mainframe computing environment and Thinking Machine's Supercomputers, as well as to undertake joint development of supercomputer software.

IBM also has an alliance with Supercomputing Systems a company formed only in 1989 by Steve Clen a leading authority on supercomputing design.

Exhibit IV-4

Examples of IBM Equity Investments

COMPANY	DESCRIPTION
Dassault Systems	Announced in <i>November 1991</i> , an undisclosed equity stake.
Industrial Computing Designs Corp.	Undisclosed majority stake taken in <i>July 1991</i> .
Enator	Minority stake in Swedish owned professional services company specialising in airline systems.
PAXUS	IBM has a 15% stake in this Australian based insurance industry applications product vendor.
Quality Software Products	10% stake in QSP a U.K. based accounting applications product vendor.
Hogan Systems	In <i>September 1990</i> takes 5% stake.
Techgnosis	IBM Belgium acquired a 25% stake in this subsidiary of Gnosis NV, <i>August 1990</i> . The company provides PC software products for database access.
Policy Management Systems	A 20% equity interest worth \$116.5M at time of purchase - <i>July 1989</i> .
American Management Systems	\$18M equity stake - <i>July 1989</i> .
Image Business Systems	\$6M investment <i>June 1989</i> .
I/Net	\$4.3m investment <i>June 1989</i> .
Computer Task Group	\$21.1M for a 15.3% stake to be increased to 19.9% <i>June 1989</i> .
Geographic Systems	Marketing and Development agreement 1989.

2. Debis Systemhaus Sogeti Alliance

One of the most significant alliance developments of 1991 was the link up between Cap Gemini Sogeti's parent Sogeti and the Debis Systemhaus subsidiary of Daimler Benz. Daimler Benz has clearly adopted a diversification strategy and links with other major corporations, notably Japan's Mitsubishi Group, fuel speculation of more alliances in the future concerned with the development of a worldwide presence in information services.

Cap Gemini Sogeti (CGS), Europe's largest professional services vendor, has substantially strengthened its position in Europe by joining forces with Daimler-Benz. In the last five years CGS has grown to over twice the size of its nearest competitors in Europe.

On July 23rd 1991 Daimler-Benz and Sogeti announced that the German group would take a FF 2.4 billion 34% stake in Sogeti, with an option to take a controlling interest in 1995. Founded by its chairman Serge Kampf, Sogeti is the holding company for the Cap Gemini Sogeti (CGS) professional services group and the recently formed Gemini Consulting group.

First step will be a German joint venture with a 51% holding for Debis Systemhaus, the computer services arm of Daimler-Benz formed in 1990, and 49% for the German subsidiary of CGS.

The combined forces of Cap Gemini Sogeti and Debis Systemhaus would produce a European workforce of 20,000. The German workforce increases from 1,000 to around 5,000 - one quarter of the new group's European workforce - compared to staff levels of 6,900 in France and 3,500 in the U.K.

In terms of 1990 revenues, Debis Systemhaus adds \$420 million (DM 750 million) to Cap Gemini Sogeti's \$1,680 million (FF 9,200 million) - though 80% of Debis's revenues were captive to Daimler-Benz. If full revenues of Hoskyns, a major U.K. acquisition by CGS in 1990, had been consolidated, the new group would have had a total revenue of over \$2.2 billion at the end of 1990.

However, only \$0.2 billion of that \$2.2 billion came from outside Europe - from the U.S. operations of CGS, which saw revenues fall 12% to \$218 million in 1990 from \$250 million in 1989. The question that remains is how the combined forces of Sogeti and Daimler Benz can leverage their European power base to reach their declared goal of being a world player in the software and services market.

Further partners will undoubtedly be brought into the group, along the lines of the Daimler-Benz agreement, to provide a global vehicle for delivery of professional information services. With some 50% of the world software and services market in the U.S.A. and a further 12% in Japan, the enlarged Sogeti group must now build on its European stronghold with one or more of the established leaders in these countries.

Some of Sogeti's competitors suggest that the unique management culture that has created CGS may not stretch to a global operation. However, the tried-and-tested formula - adding leading national companies to the group but encouraging them to retain their cultural freedom with a sound financial framework - shows little sign of running out of steam.

The financial strength and diverse market penetration of the combined group can only bode well for the many clients looking for long-term stable relations with their primary service suppliers.

Although CGS has always declared an aversion to being in the product business - software or hardware - it does have alliances in place in order to enable it to deliver suitable products as components of its solutions. It can be expected to continue to maintain its independence from product vendors.

Debis Systemhaus will also strengthen the CGS position in systems operations by extending its market leadership in the U.K. into Germany and bringing further economies of scale and greater credibility to the new systems operation venture formed in France between Hoskyns and Cap Sesa, Cap Sesa Hoskyns.

In the manufacturing sector Debis Systemhaus brings an exceptional German centre of excellence to CGS. What better place for a professional services vendor to build a market-leading position in manufacturing?

3. Other Collaboration Initiatives

Examples of some of Digital's collaborative initiatives are listed in Exhibit IV-5.

Groupe Bull is believed to be active in seeking to develop alliances with another major systems vendor. It is understood to have held talks with both Digital and Hewlett-Packard in the United States. Continuing heavy losses and high R&D costs are the principal motivating forces for seeking such partnerships. Although NEC has a 4.7% stake in Bull, increased involvement with a Japanese company is not currently politically acceptable within France.

Bull's existing alliance with MIPS Computer Systems appears under threat and this could lead to BULL defecting from the ACE (Advanced Computing Environment) collaboration led by Digital and Compaq. Bull Chairman Francis Lorentz resigned from MIPS' board early in 1991. The issues involved here principally relate to access to chip set technology and thus the technical and marketing merits of being based on MIPS technology in the face of Hewlett-Packard's 'precision' technical and marketing chips and the IBM- Apple-Motorola collaboration in chip design and development.

Exhibit IV-5

Examples of Digital's Collaborative Ventures

COMPANY	DESCRIPTION
Microsoft	An alliance to <i>manufacture</i> software applications and distribute to Digital customers.
Olivetti	An agreement to supply Digital with personal computers for reselling in Europe and portable computers for worldwide markets.
Apple	An agreement for cross marketing of products in Europe. Digital to sell Macintosh products through its reseller network, Apple to sell VAX, RISC servers and network software through dedicated Apple Centre resellers.
Cegid Informatique SA	Digital France has taken a 5% stake (value \$5M) in this applications and services firm.

In the field of systems integration an interesting collaborative initiative is that between Computer Sciences Corporation and Mitsui & Co. who teamed up in the course of 1990 to offer services to Japanese companies. The agreement targets the European and U.S. subsidiaries of Japanese groups. CSC is working with Mitsui Knowledge Industries, a systems operations subsidiary of Mitsui and Mitsui Comtek a Tokyo based computer and communications product trader.

Another example of a joint venture formed to tackle the systems integration market is that between the Sema Group and British Aerospace. BAe SEMA is a 50/50 joint company formed during 1991.

Hewlett-Packard Co. and Software AG are to jointly to market UNIX versions of Adabas, Natural and Network for HP 9000 computer systems from January 1992.

Norsk Data's subsidiary ND DataShop signed in August 1991 a one year agreement to sell IBM personal computers in Norway. At the same time it also agreed a letter of intent to sell Apple Computer products. It is likely to extend the agreements to its MicroAge operation for the rest of Scandinavia.

Norsk Data and Thompson CSF SA's maintenance arm Thomainfor, created a joint venture ND Service Team in June 1991.

ICL is another example of a company that has been very active in developing collaborative ventures to meet its technology, market and service solution needs. In addition to its long standing technology agreement with Fujitsu (now formalised in Fujitsu's 80% stake in the company) ICL has also developed technology collaborations with the following organisations:

- Sun
- AT&T
- Acer
- Ingres
- Northern Telecom.

ICL's most recent collaborative initiative is that with Bell Atlantic's SORBUS independent maintenance company in Europe. A joint venture has been set up (51% ICL, 49% Sorbus, to allow consolidation within ICL's accounts) to provide ICL with access to the growing opportunity for servicing multi-vendor system sites in Europe.

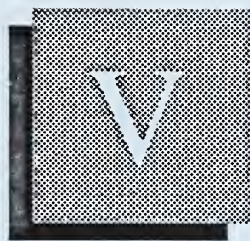
The International Computer Group (ICG) is an example of a cooperative agreement between a number of separate European vendors designed to provide pan-European support and services that would be impossible from the individual national companies. The cooperative agreement specifically limits the membership to one company per European country.

ICG was founded in 1989 as a joint venture by Computacenter in the UK, Random in France and CompuNet in Germany. It has now grown across other European countries to generate a nominal combined revenue of \$1.6 billion in 1990 with 175 outlets (a high proportion of revenues are accounted for by equipment sales). Other group members include:

- MCC (Belgium)
- DanaData (Denmark)
- ABC (Greece)
- Raet (Netherlands)
- Sistex (Italy)
- EDB (Norway)
- Logic Control (Spain)

The group also has associate companies in other countries as follows:

- EDV (Austria)
- Business Automation (Ireland)
- Reditus (Portugal)
- Owell (Sweden)
- MPC (Switzerland).



M&A in the European Information Services Environment

V M&A In the European Information Services Environment

Whilst the rate of merger and acquisition (M&A) activity experienced in the 1980's has abated it remains a very significant factor in the re-engineering of the information services industry likely to take place over the next decade.

This chapter reviews the overall significance of M&A activity to the information services industry by covering the following areas:

- A review of significant M&A activity in the IT industry.
- A discussion of the principal problems associated with M&A initiatives.
- Legal constraints on M&A in Europe.

A Mergers & Acquisitions in the Information Services Industry

The impact of M&A activity can be significant in terms of developing size and thus market position. Companies cited as having undertaken significant acquisitions in Chapter III Section B, namely Cap Gemini Sogeti, the Sema Group, Computer Associates, Sligos, SD-Scicon and Axime are discussed below along with some other examples of M&A activity. In addition the hostile takeover of SD-Scicon by EDS, perhaps the most significant acquisition of an information services company in 1991, is also discussed.

1. M&A Examples

Cap Gemini Sogeti, formed in 1975 as a merger of three separate information services firms has maintained a constant search for good quality acquisition targets to extend its growth and capabilities. Exhibit V-1 itemises significant acquisitions made by the company over the past five years. CGS went public on the Paris Stock Exchange in 1985. CGS had at this time already acquired a number of companies including DASD in the U.S. in 1981. It had already acquired a 49% in SESA in France, Datalogic in Norway and Pandata in Holland by 1980.

Exhibit V-1**CGS Acquisition History 1986-1991**

YEAR	COMPANY ACQUIRED
1990	HOSKYNS (69.5%) - U.K. United Research - U.S. Gamma International - U.S.
1989	SCS - Germany Accept Data - Sweden
1988	Datalogic - Sweden Sofcon - Denmark AD&D - Denmark Heikkamaki - Finland
1986	IBAT - Germany GE-DA - Italy SESA (42% holding increased to 93%) - France The Consulting Division of CGA Computer Inc - U.S.A

The Sema Group was itself formed out of a merger between the UK based Cap Group and the French based Sema Metra organisation in 1988. Subsequently the Sema Group has undertaken further acquisitions notably that of ADV/Orga AG in Germany where it gained a controlling interest of 56.48%.

The US based software products vendor Computer Associates (CA) has been one of the most active acquirers in pursuit of a determined strategy to grow its revenues and profits. Exhibit V-2 summarises CA's acquisition history.

Exhibit V-2

Computer Associates International, Acquisitions Summary

COMPANY	PRODUCT LINE	DATE ACQUIRED	PRICE (\$ MILLIONS)
Access Technology	20/20 Spreadsheet	1991	N/A
Pansophic Systems Inc.	-	1991	\$290M
On-Line Software Int.	-	1991	\$120M
Cullinet	IDMS	1989	\$333M
ADR	Datacom/DB Database IDEAL 4GL	1988	N/A
UCCEL Corporation	Mainframe systems and banking software	1987	800 (stock)
L & L Software, Inc.	Micro-based cost accounting software	1987	N/A
BPI Systems, Inc.	Micro accounting software	1987	N/A
Mega Group	Mainframe spreadsheets	1986	N/A
Integrated Software Corp.	Graphics applications	1986	67
Software International Corporation	Financial applications	1986	24
Top Secret (CGA Computer product)	MVS security software	1985	25
Management and Computer Services, Inc..	Programmer productivity	1985	N/A
Value Software, Inc.	Systems software	1985	N/A
Basic Software Group	Micro applications	1985	N/A
Arkay Computer, Inc.	MVS/VSE conversion software	1984	N/A
Johnson Systems, Inc.	Job accounting software	1984	16
Sorcim Cor.	Micro applications	1984	26.5
Information Unlimited Software, Inc.	Micro applications	1983	9.5
Stuart P. Orr and Associates, Inc.	Financial applications	1983	N/A
Capex Corp.	Systems software	1982	22 (stock)

Sligos, the French based information services company, specialising in systems for the banking and finance sector, has also undertaken a consistent acquisition strategy in pursuit of penetrating its key target markets. Exhibit V-3 lists its principal recent acquisitions.

Exhibit V-3

Recent Sligos Acquisitions

1991		
	O'DATI	Spain
	MED. INFORMATICA	Spain
	HOLL	Germany
1990		
	MESARTEAM	Italy
	MAINTEC	France
	SERTECH	France
	PINK E.	Netherlands (Joint-venture)
	PROCESS A	Spain

SD-Scicon (now acquired by EDS - see next section) was formed in 1988 through the acquisition of Scicon from BP by Systems Designers Ltd.

Axime, another French based vendor, is the creation of a merger between three previously independent vendors in France FITB, Segin and Sodinfor during 1990. Exhibit V-4 provides some key statistics concerning Axime's constituent merger partners.

Exhibit V-4

Axime Merger Constituent Companies

	FITB	SEGIN	SODINFORG	AXIME
Number of employees	1,400	1,100	1,200	3,700
1989 revenues FF millions	704	520	545	-
1990-91 revenues FF millions				2,330
Locations of operations	Paris	Bordeaux	Blois Lille Lyon Metz Paris Rouen Strasbourg Germany U.K. Belgium Spain Italy Luxembourg	Bourges Dijon Lille Lyon Nancy Nantes Orleans Paris Rennes Toulouse

Some other examples of recent significant merger and acquisition activity amongst information services firms includes:

- CSC's acquisition of the consultancy companies Butler Cox and the Index Group.
- The World Software Group's acquisition of an 11% stake in CTG.
- Raet's acquisition of Automation Centre International for \$65 million.
- CGI acquired the German company Interprogram, the U.K. based LS3 and the French company PRODSTAR.
- GSI acquired the German company Lammert.

Amongst the systems vendors there has also been significant acquisition activity, apart from IBM's collaborative equity participations described in the previous chapter. Recent acquisitions of particular note include:

- Digital's acquisition of a 65% stake in Mannesman-Kienzle, Philips' minicomputer operations and Alcatel's VAX reseller activity.
- ICL's acquisition of Nokia.
- AT&T's acquisition of NCR and Teradata.
- The merger of Siemens-Nixdorf Informationssysteme's Norwegian operations with Norsk Data's ND Partner marketing and systems integration company.

2. The EDS SD-Scicon Acquisition

The announcement on the 19th August 1991 that EDS had finally gained control of SD-Scicon, one of the few remaining large U.K. owned computer services firms, finally gained EDS a leading position in the European market to match its worldwide ambitions.

EDS's final offer of 60p per share placed a total value on SD-Scicon of £ 162 million.

It is common wisdom that hostile takeovers are to be avoided amongst professional services firms since it is thought that the *assets* (the employees) can so easily walk away.

However, despite this apparent drawback, it is clear that EDS was prepared to take this supposed risk to ensure the prize of propelling themselves from a ranking of number 20 in the Western European software and services market to the number 6 slot in the industry. Ironically SD-Scicon itself was no stranger to hostile takeovers, the acquisition in the early '80s of Systems Programmers Limited (SPL) by SD (Systems Designers) was not well received and followed by considerable staff attrition.

It is also possible to postulate that the risk involved in EDS's hostile acquisition of SD-Scicon was offset by the relatively low price finally accepted by a majority of the shareholders. SD-Scicon argued in their final defence document 'REJECT the EDS bid IT IS FAR TOO LOW' that the value of the shares based on comparisons with comparable companies was 76p, on a separate valuation of the individual business comprising SD-Scicon, over 96p and against comparable acquisitions in the recent past 110p. The support for these claims was made as follows:

- A comparison with Logica and the Sema Group, the only other large independent software and services firms listed on the London Stock Exchange showed that they were rated (August 1991) at an average price earnings ratio of 18.6 times. On the basis of SD-Scicon's profit forecast a share price of not less than 76 pence was derived.

- The valuation of the individual business was argued as follows:
 - Logica and the Sema Group were trading on an average market capitalisation to turnover of approximately 67%. (The Data Sciences management buyout from Thorn EMI showed an equivalent ratio of 77%). At 67% of annual revenues of £ 139 million the U.K. business could be valued at £ 93 million.
 - In France SD-Scicon's operation GFI was compared to both Hoskyns and ISTEEL, both recently acquired at 152% and 212% of revenue respectively. CGS, the largest European independent information services vendor was trading on the Paris Bourse at over 100% of revenue. GFI would be worth £ 103 million at 100% of revenue.
 - In the United States SD-Scicon had recently declined an offer of £ 40 million for their subsidiary Systems Control.
 - Together these three estimates would value SD-Scicon at £ 236 million, which equvalates to a share value of 96p.
- The argument based on comparable acquisitions was based on the data shown in Exhibit V-5. The lowest historic price earnings ratio for a comparable U.K. acquisition, being that of CGS for Hoskyns in July 1990, was 29.4 times, valuing SD-Scicon shares at 110p.

In addition to the above defence SD-Scicon also argued that none of the calculations made took into account SD-Scicon's strategic value to EDS. As was argued above, strategic value is potentially of very great significance to EDS in placing it amongst the leading group of independent vendors based on annual revenues, and this without taking into account EDS's very considerable captive revenues from GM in Europe.

Exhibit V-5

Comparative Table of Acquisitions

<i>Date</i>	<i>Bidder</i>	<i>Target</i>	<i>Historic price earnings ratio</i>
June 1988	EDS	MTech	22.8 x
Sept 1989	AT&T	Istel	53.1 x
July 1990	CGS	Hoskyns	29.4 x
May 1991	ACT	Quotient	49.5 x
May 1991	Computer Sciences	Butler Cox	42.4 x
	Average		39.4 x
July 1991	EDS (@ 45p/share	SD-Scicon	12.0 x
August 1991	EDS (@ 60p/share	SD-Scicon	16.0 x

B Pitfalls Inherent in M&A Activity

We have already addressed the principal motivating factors for M&A in Chapter III above, in this section are discussed some of the principal problems that can be incurred.

In approaching M&A initiatives executives and managers should apply three key tests to the target company:

- How *attractive* is the company, it must *fit* into the company's strategy, the temptation to simply grow the portfolio must be strongly resisted.
- What is the *cost* of entry - this must not offset future profits to an uneconomic extent.
- Will *competitive* capability be increased.

Many problems in M&A activity stem from the failure to undertake a stringent analysis of these questions - diversification just for the sake of growth does not generally work.

The potential acquirer must initially undertake a thorough identification of its own acquisition parameters, in particular its own motivations. This is particularly the case concerning hostile takeovers where the acquirers' motivations may will end up creating more problems than it solves.

Two very significant reasons for failure in the M&A activity are:

- Only having superficial knowledge of the target company.
- Underestimation of the integration process.

As referenced above in the EDS/SD-Scicion situation, it is a widespread belief that hostile takeovers are impossible in the professional services business. This remains to be proven in the case of EDS but it is not true that the people 'assets' will just walk out of the door. There will be a significant issue to address with respect to senior management but it is generally true that middle level managers and technical staff will largely remain intact. Naturally the integration process is critical to the future developments of the business and this needs to address the following potential problem areas:

- Staff motivation
- Company culture
- Organisation structure
- Company image
- Company methods and procedures.

The quality of people *assets* is often hidden from the potential acquirer and difficult to assess. It is easy to define the tangible assets of the firm and its financial performance as measured in sales and revenue growth, profit and the various financial ratios such as ROI, ROE etc. It is much more difficult to assess the real commitment of the management and the hidden assets of:

- The quality of the people
- Product and service quality
- The solidity of the customer base
- The potential worth of the company on the marketplace.

It is these more difficult to determine factors that are probably more important in forming a true assessment as to the advisability of proceeding with an acquisition and thus avoiding potential problems. One of the major problems for information services company acquisitions seems to be gaining a true understanding of the business. This probably implies getting a very good understanding of the people.

Potential acquirers must be prepared to walk away from a potential deal where all the factors, particularly the price to be paid do not match the pre-defined criteria. No single acquisition should be that important to the acquirer.

C **Legal Constraints**

It is beyond the scope of this study to enter into a detailed discussion of the regulatory context within which M&A activity takes place within Europe. However it is relevant to discuss the broad background to the key legal constraints that apply to companies within Europe.

New European merger regulations came into force on the 21st September 1990 introducing a radical change in the system of European merger control. The principal idea was that one regulator, the European Commission in Brussels, was to deal with all major transactions affecting the EC, this of course implied a significant transfer of jurisdiction from the national authorities to the Commission.

A political compromise had to be made for the joint consent of the national governments. Germany and the U.K. required that the EC should assess a transaction only on competition grounds. In contrast France and Italy had wanted to take into account other factors such as the social, industrial and regional implications of a merger. A competition based regulation was eventually agreed upon although there is some controversy over the way the regulations are being interpreted in practice.

At the national level only six EC member states have developed merger control rules, France, Germany, Italy, Spain, Portugal and the U.K. It was clearly in the interests of the other member states to have EC merger control rules to prevent large European or non-EC multinationals obtaining dominant market power to the detriment of their national companies.

The EC M&A regulation (Reference 4064/89) applies to all *concentrations* having a *Community dimension*, this is defined as:

- *Concentration* - this is widely defined in the Regulation and occurs where two or more companies merge or where one (or more) companies acquire 'direct or indirect control of the whole or part of one or more other companies'.
- *Community dimension* - a *concentration* has a *Community dimension* where:
 - the aggregate worldwide revenue of all the companies concerned is more than 5 billion ECU
 - the aggregate Community-wide revenues of at least *two* of the companies concerned is more than 250 million ECU
 - and unless each of the companies concerned achieves more than *two thirds* of its aggregate Community-wide revenues within one and the same member state.

These rules have been couched in order to exclude mergers between small and medium sized companies, relatively minor acquisitions by large companies and cases where the effects of the transaction are felt primarily in a single member state. As such few mergers and acquisitions within the information services sector are likely to fall within the jurisdiction of the Regulation.

At the country level local regulations are more likely to have an impact, and at this level there exist wide variations in acquisition practice, attitudes to hostile takeovers and foreign investment.

A significant recent example of regulatory impact was that inflicted on the French services vendor Sligos by the U.K. Monopolies and Mergers Commission. Sligos was the winning bidder to take over Signet the large U.K. based credit card processing firm that originated from the set up of the Access card in the U.K. The objection which was accepted by the U.K. Monopolies and Merger Commission was that Sligos was state-owned through Credit Lyonnais. The result was that the runner-up in the original bid was awarded the acquisition, this was American Express's First Data Resources (FDR) subsidiary.

